CLAIMS

I claim:

1. A method for the assessment of seam pucker and other surface irregularities comprising directing at the surface a line beam from an illuminator, imaging the line on the surface formed by the line beam and analysing data of the image to produce an objective indication of the degree of regularity of the surface.

2. The method of claim 1, in which parallel line beams are directed at the surface.

3. The method of claim 2, in which the parallel line beams are directed to form lines on the surface parallel to and either side of the seam, and at an angle from a plane perpendicular to the surface.

4. The method of claim 1, in which the illuminator comprises a line beam laser.

5. The method of claim 1, in which the line on the surface is imaged by a pixel imager, such as a CCD array camera.

6. The method of claim 1, in which the image is analysed in a computer programmed with image analysis software.

7. The method of claim 6, in which the result of analysing the image is a display of a distribution of severity of deviation of the surface from flat.

8. The method of claim 1, in which the surface comprises a limp material, such as a textile fabric mounted on a flat support bed.

9. The method of claim 8, in which the flat support bed is, for the assessment,

inclined steeply with the material clamped uppermost and resting against the bed below the clamping location.

10. The method of claim 8, in which the material is the same size as the bed.

11. A method of claim 10, in which the material is cut to size using the bed as a template.

12. Surface irregularity assessment apparatus comprising:

a line beam illuminator;

a support arrangement for the surface under assessment such that the line beam illuminator is directed at the surface to illuminate a line thereon;

an imaging arrangement adapted to image the line illuminator on the surface by the line beam illuminator; and,

analysis means adapted to receive image data to produce an objective indication of the degree of irregularity of the surface.

13. The apparatus of claim 12, in which there are one, two or more line beam illuminators casting parallel beams.

14. The apparatus of claim 12, in which the imaging arrangement comprises a pixel imaging arrangement.

15. The apparatus of claim 14, in which the pixel imaging arrangement comprise a CCD array.

16. The apparatus of claim 12, in which the line illuminator and the imaging arrangement point at the surface from different directions.

17. The apparatus of claim 12, in which the line illuminator is a laser.

18. The apparatus of claim 12, in which the analysis means comprising a computer programmed with image analysis software.